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FISH & RICHARDSON P.C.
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER	
MULPURI, SAVITRI	

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/081,971
Filing Date: February 20, 2002
Appellant(s): YAMAZAKI ET AL.

Yamazaki et al
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3/28/2005 appealing from the Office action mailed 8/8/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal contained in the brief. Therefore, it is presumed that there are none. The board, however, may exercise its decision to require an explicit statement as to the existence of any related appeals and interferences.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

20020018912 Jung et al 2-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-11, 19, 24-50, are rejected under 35 U.S.C. 102(e) as being anticipated by Jung et al (US 2002/0018912 A).

Jung et al teaches a method of depositing a layer for electroluminescent device: Jung teaches successively forming a first function region comprising hole transportation layer of first organic compound on an electrode, organic emission layer and organic electron transportation layer. Jung et al specifically teaches simultaneous irradiation of ultraviolet light generated by lamp during deposition, wherein ultraviolet light having wavelength in the range of 100-200nm or 254 nm to 320 nm to result compact film formation (fig.2 and related description and para0062). Jung et al teaches direction of irradiation is from the same direction of evaporating of the first and second organic compound, wherein evaporation source from which the first organic compound is evaporated is differ rent from a evaporation source from which the second organic compound is evaporated, and wherein first organic compound source is evaporated from first evaporation source and second organic compound is evaporated from second

evaporation source (see fig. 1 and related description). Jung also discloses light source, first evaporation source and second evaporation source are all in same plane (see para0036-0039, para0077. Jung et al clearly discloses simultaneous deposition of more than two organic compounds in vacuum deposition chamber, which inherently results mixed region of first organic compound and second organic compound, which is essential for making efficient electroluminescent devices giving emission at desired wave lengths (see para 0036 - para 0039, para0076-0077 and claim 9).

Jung et al specifically teach forming an organic thin film by simultaneous deposition of organic compound A and organic compound B and simultaneous irradiation by means of vacuum deposition (fig.1), wherein the organic thin film prepared by polymerization of the compound formula 1 having at least one acetylene group. Jung et al also teach forming electroluminescent device can have hole transportation layer, emission layer and electron transport layer (fig2), wherein transportation layer or emission layer formed by depositing at least one compound in formula 1, which suggest that transportation layer or emission layer can have at least one organic compound A or B or together, which satisfy the instant claimed process.

Claims 20, 51-54 are allowed.

(10) Response to the Argument

Appellant argues that Jung et al nowhere describes a first function region with a first organic compound, a mixed region, a second function region with second organic compound, wherein the mixed region is formed of first organic compound and second

organic compound. However, Jung et al specifically teach forming an organic thin film by simultaneous deposition of organic compound A and organic compound B and simultaneous irradiation by ultraviolet light (UV) for polymerization in vacuum deposition chamber (Fig.1). Jung et al also teach the organic thin film prepared by of the compound formula 1 can have organic compounds A and B having acetylene group (see para 0028, 0036,0039).

Jung et al also teach forming electroluminescent device can have hole transportation layer, emission layer and electron transport layer (see third drawing in fig2), wherein transportation layer or emission layer are formed by deposition of at least one compound in formula 1, which suggest that transportation layer or emission layer can have at least one organic compound i.e., organic compound A or organic compound B or together. Since Jung et al gives a choice of simultaneously depositing organic compound A and B, the emission layer can be mixture of organic compound A and organic compound B (see para 0037-0039, para 0076-0077). Moreover, during vapor deposition in the invention of Jung et al, while shutter in vapor deposition chamber (fig.1) is being closed and opened, inherently the emission layer has organic compounds used for hole transport layer and electron transport layer, because there is a interfacial effect at the interface of the hole transport layer and the emission layer and at the interface of the emission layer and the electron transport layer forming mixed regions of the organic compounds, which are used to form the hole transportation and the electron transport layer. Also, in forming electroluminescent organic devices, the emission layer is a grading organic layer with mixed organic compounds, which are

used to form hole transportation layer and electron transportation layer, see for evidence Fig. 1 layers 29, 31, 30 in So et al (US 5, 925,980).

(11) Appendix of Evidence

None

(12) Appendix of Related proceedings

None

The following ground(s) of rejection are applicable to the appealed claims: For the above reasons, it is believed that the rejections should be sustained.

Respectfully Submitted,

Savitri Mulpuri

Primary Examiner

Art Unit 2812

Sm

January 07 2006

Conferees:

Savitri Mulpuri

Michael Lebentritt

AHH

Andrew Hirshfeld